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# INFORMATION DISCLOSURE STATEMENT

US PATENT APPLICATION YPL-0027 FILED 02/28/02 FIRST INVENTOR: YEOM, ET AL.

TITLE Layer-by-Layer Etching Apparatus Using Neutral Beam and Method of Etching Using the Same

EXAMINER \_\_\_\_\_

ART UNIT \_\_\_\_\_

jc868 U.S. PTO  
10/086497  
02/28/02

1. ☒ Applicant submits herewith a copy of (a) attached form PTO-1449, which lists all patents, publications, applications, or other information submitted for consideration by the Office; (b) a legible copy of each document required by 37 C.F.R. §1.98(b)(2).
2. ☐ Applicant herein apprizes the Patent Office of prior art in a parent U.S. application from which this application obtains the benefit of an earlier filing date under 35 U.S.C. §120. The Serial Number of the parent application is U.S. Application \_\_\_\_\_ filed \_\_\_\_\_ and entitled \_\_\_\_\_.  
The publications cited therein are listed on attached Form PTO-1449. In accordance with 37 C.F.R. §1.98(d) copies of the listed publications are not required.
3. ☐ In accordance with 37 C.F.R. §1.98(a)(3), Applicant hereby certifies that for each reference not in English (check at least one box below):
  - ☐ A copy of a translation of one or more non-English document, or portion thereof, is provided herewith;
  - ☐ A concise explanation is provided (check at least one box below):
    - ☐ in the accompanying foreign or international search report; ☐ incorporated into the specification; and/or ☐ provided herewith.

## 37 C.F.R. §1.97(b)(1), (b)(2) – WITHIN 3 MONTHS OF FILING OR ENTRY IN NATIONAL STAGE

4. ☒ Since this Information Disclosure Statement is being filed within three months of the filing date of the subject application or within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application, no fee or certification under 37 C.F.R. §1.97(e) is required.

## 37 C.F.R. §1.97(b)(3), (b)(4) – PRIOR TO MAILING OF FIRST OFFICE ACTION OR FIRST ACTION AFTER REQUEST FOR CONTINUED EXAMINATION

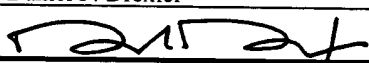
5. ☐ Since this Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. §1.114, no fee or certification under 37 CFR §1.97(e) is required.


## 37 C.F.R. §1.97(c) – AFTER FIRST ACTION, BEFORE FINAL ACTION OR ALLOWANCE

6. ☐ Since this Information Disclosure Statement is being filed outside of the period provided for in 37 C.F.R. §1.97(b), but before the mailing date of a Final Rejection or Notice of Allowance, the submission is being accompanied by (one of the following boxes must be checked):
  - a. ☐ the fee required under 37 C.F.R. §1.97(c)(2) and specified in 37 C.F.R. §1.17(p).
  - b. ☐ the statement specified in 37 C.F.R. §1.97(e) (Box 8 or 9 must be checked).

## 37 C.F.R. §1.97(d) – AFTER FINAL REJECTION OR ALLOWANCE

7. ☐ Since this Information Disclosure Statement is being filed after the period specified in 37 C.F.R. §1.97(c), but on or before payment of the issue fee and is accompanied by both the statement specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p). (Box 8 or 9 must be checked.)
8. ☐ In accordance with 37 C.F.R. §1.97(e)(1) Applicant's attorney certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. ☐ The foreign or international search report(s) is/are enclosed.
9. ☐ In accordance with 37 C.F.R. §1.97(e)(2) Applicant's attorney certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 1.56(c) more than three months prior to the filing of the information disclosure statement.
10. ☒ In the event the Commissioner of Patents deems that any additional fee is required under 37 C.F.R. §§ 1.16 and 1.17 in connection with this application, Applicant's attorneys authorize that such fee be charged to Deposit Account No. 06-1130.
11. Consideration of this Information Disclosure Statement is respectfully requested.

Name:	Daniel F. Drexler	Registration Number	47,535
Signature		Date	28 FEB. 2002

CERTIFICATE OF MAILING OR TRANSMISSION: I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Washington DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.			
Name	Jennifer Matson		
Signature		Date	2-28-02

*(Use several sheets if necessary)*

Application Number

**Filing Date** 02/28/02

Group Art Unit

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

		B.A. Helmer and D.B. Graves. "Molecular dynamics simulations of $\text{Cl}_2$ impacts onto a chlorinated silicon surface: Energies and angles of the reflected $\text{Cl}_2$ and $\text{Cl}$ fragments", J. Vac. Sci. Technol A 17(5), Sep/Oct 1999, pages 2759-2770

**EXAMINER**

**DATE CONSIDERED**

**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.